

Notice of Allowability

Application No.

09/882,624

Examiner

Erik Kielin

Applicant(s)

WYLIE, IAN

Art Unit

2813

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the after-final Amendment filed 26 May 2005.
2. ☒ The allowed claim(s) is/are 1-4, 6-9, 11-13, 15-18, 20-24, 26-30 and 32.
3. ☒ The drawings filed on 15 June 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT

This action responds to the Amendment filed 26 May 2005.

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Greg Parker on 7 June 2005.

The application has been amended as follows:

In claim 1 the last line, after "substrate" insert --wherein the second portion of the one of the source/drain region comprises polysilicon--.

In claim 7 the last line, after "substrate" insert --wherein the second portion of the one of the source/drain region comprises polysilicon--.

In claim 12 the last line, after "substrate" insert --wherein the second portion of the one of the source/drain region comprises polysilicon--.

In claim 17 the last line, after "substrate" insert --wherein the second portion of the one of the source/drain region comprises polysilicon--.

In claim 21 the last line, after "substrate" insert --wherein the second portion of the one of the source/drain region comprises polysilicon--.

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In claim 27 the penultimate line, after "substrate" insert --wherein the second portion of the one of the source/drain region comprises polysilicon--.

Cancel claims 5, 10, 14, 19, 25, and 31.

2. Claims 1-4, 6 and 7, 8, 9, 11 and 12, 13, 15, 16 and 17, 18, 20 and 21-24, 26 and 27-30, 32 are allowed.

3. The following is an examiner's statement of reasons for allowance: The closest prior art references of record are **Jang** (US 5,391,907) and **Teng et al.** (US 5,043,778). **Jang** teaches all of the features of each of the independent claims 1, 7, 12, 17, 21, and 27, except that the second portion of the source/drain region formed over the isolation region and in contact with the second post portion of the isolation region comprises polysilicon. **Teng** teaches all of the claimed features except that the second post portion of the isolation region extends above the semiconductor substrate. There exists no suggestion to combine the references of **Jang** and **Teng**.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 6,346,729 B1 (**Liang** et al.) teaches forming the source/drain regions in part over the semiconductor substrate and in part over the isolation region 9, 9b.

Each of US 6,331,469 B1 (**Park** et al.) and US 5,956,598 (**Huang** et al.) teach forming an isolation region having a first portion formed within the semiconductor substrate and a second narrower post portion formed above the first portion and extending above the semiconductor substrate.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erik Kielin whose telephone number is 571-272-1693. The examiner can normally be reached from 9:00 - 19:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Whitehead, Jr. can be reached on 571-272-1702. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Erik Kielin
Primary Examiner
June 8, 2005